► **CLINICAL BOTTOM LINE**
A 50 mm/s ECG should be considered when differential diagnosis of narrow complex tachycardia is difficult.

Accardi AJ, Miller R, Holmes JF. Enhanced diagnosis of narrow complex tachycardias with increased electrocardiographic speed. *J Em Med* 2002;**22**(2):123–6.

Lignocaine as a pretreatment to rapid sequence intubation in patients with status asthmaticus

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Abstract
A shortcut review was carried out to establish whether pretreatment with intravenous lignocaine is of benefit in asthmatic patients undergoing rapid sequence intubation (RSI). Altogether 157 papers were found using the reported search, of which one presented the best evidence to answer the clinical question. The author, date, and country of publication, patient group studied, study type, relevant outcomes, results, and study weaknesses of these best papers are tabulated (table 3). It is concluded that there is no good evidence to support the use of lignocaine in this circumstance.

Clinical scenario
A patient attends the emergency department in status asthmaticus. On examination they have a sinus tachycardia at a rate of 150/min, an oxygen saturation of 92% on high flow oxygen, and a pCO_2 of 7.0 kPa. Despite maximal medical treatment they are becoming exhausted. You decide that the patient needs a RSI and continuous mandatory ventilation. You wonder whether the pretreatment with lignocaine will attenuate the respiratory response (bronchospasm) to airway manipulation.

Three part question
In [asthmatic patients who need RSI and ventilation] does [pre-treatment with intravenous lignocaine prior to RSI] reduce the incidence of [adverse airway responses]?

Search strategy
Medline OVID 1966 to week 4 June 2005. [exp Asthma OR exp Asthma, exercise induced OR asthma$.mp OR exp Bronchial spasm OR bronchospasm.mp] AND [exp Lidocaine OR lidocaine$ OR lignocaine$ OR lignocaine.mp]. LIMIT to human, English language, and publication year 2000–2005.

Embase OVID 1980 to week 27 2005. [exp Asthma OR exp Asthma, exercise induced OR asthma$.mp OR exp bronchospasm OR bronchospasm.mp] AND [exp Lidocaine OR lidocaine$ OR lignocaine$ OR lignocaine.mp]. LIMIT to human, English language, and publication year 2000–2005.

The Cochrane Library Issue 2 2005. [{Asthma MeSH }] AND [{bronchial spasm MeSH}] AND [{lidocaine MeSH OR lignocaine ALL FIELDS}].

Search outcome
Altogether 157 papers were found in 2000–2005, of which 143 were unique, of which one was relevant to the question.

Comments
Tracheal intubation in asthmatics is linked to the risk of life threatening bronchospasm. This reflex is in part neurally mediated through the vagus nerve. Local anaesthetics have been used as a pretreatment to airway stimulation in susceptible patients in the hope of attenuating the reflex induced bronchoconstriction. The National Emergency Airway Course recommends a pretreatment dose of intravenous lignocaine (3 mg/kg) given 3 minutes prior to intubation in this patient group. There is no evidence from the above trial that this will be of value. Interestingly pretreatment with albuterol did attenuate the response.

► **CLINICAL BOTTOM LINE**
There is no evidence for the use of lignocaine as a pretreatment agent in asthmatic patients needing an RSI.

Maslow AD, Regan MM, Israel E, *et al*. Inhaled albuterol, but not intravenous lidocaine, protects against intubation-induced bronchoconstriction in asthma. *Anesthesiol* 2000;**93**:1198–204.

Steroids in sudden sensorineural hearing loss

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doi: 10.1136/emj.2005.029066

Abstract
A shortcut review was carried out to establish whether steroids are of benefit in sudden onset sensorineural deafness. Altogether 175 papers were found using the reported search, of which five presented the best evidence to answer the clinical question. The author, date, and country of publication, patient group studied, study type, relevant outcomes, results, and study weaknesses of these best papers are tabulated (table 4). It is concluded that there is insufficient good evidence to recommend early steroid treatment in this condition.

Clinical scenario
A 35 year old man presents to the emergency department with an 18 hour history of a right sided sudden hearing loss. Examination does not reveal a cause. A diagnosis of idiopathic sensorineural deafness is made. Your consultant suggests that a course of prednisolone might be of benefit. You discuss this with the registrar in audiological medicine who does not support this approach. You wonder who is right.

Table 3

Author, date, country	Patient group	Study type	Outcomes	Key results	Study weaknesses
Maslow AD *et al*, 2000, USA	60 asthmatic patients undergoing intubation	Prospective randomised controlled trial	Lower pulmonary resistance	8.2 *v* 7.6 cm water (ns)	
	1.5 mg/kg lidocaine *v* saline given 3 min before tracheal intubation		Frequency of airway response to intubation	6/30 *v* 5/ 27 (ns)	